IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Inventor:

Genichiro OTA et al.

Art Unit 2611

Appln. No.:

10/565,380

Exr. K. Timory

Filed:

January 23, 2006

Conf. No. 5562

For:

 $MODULATION\ APPARATUS,\ DEMODULATION\ APPARATUS,$

MODULATION METHOD AND DEMODULATION METHOD

SUMMARY OF SUBSTANCE OF TELEPHONE INTERVIEW

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicants wish to thank the examiner and his supervisor for the courtesy extended to Applicants' representative during a telephone interview conducted on January 12, 2011. The participants were Examiner Kabir Timory, SPE Shuwang Liu, and David Ward, Reg. No. 45,198. The interview focused on the rejection of claims 1, 4, 6, and 8, under 35 USC §103(a), as being unpatentable over Daoud (US 4,835,791) in view of Muzzi (US 3,628,155). No agreement was reached.

During the interview, Applicants' representative argued that Daoud discloses using a higher carrier frequency to generate an upper side band (USB) signal than that used to generate a lower side band (LSB) signal, whereas Applicants' claimed subject matter recites using a higher carrier frequency to generate an LSB signal than that used to generate a USB signal. In

response, the examiner argued that using a higher or lower carrier frequency for generating a

USB signal than that used for generating an LSB signal would be an obvious design choice for a

skilled artisan.

Additionally, Applicants' representative argued that Daoud discloses employing a 200

Hz frequency difference between the two carrier frequencies used to generate the LSB and USB

signals, whereas the Applicants' claimed subject matter employs a frequency difference given by

a fundamental frequency of symbols modulated into the LSB and USB signals. In response, the

examiner and his supervisor stated they do not understand: (1) what is meant by Applicants'

recited fundamental frequency of a symbol and (2) how a symbol may have a fundamental

frequency. The examiner further stated that because the meaning of the recited fundamental

frequency of a symbol is unclear, he was broadly interpreting this fundamental frequency to

correspond to the 200 Hz frequency gap disclosed by Daoud.

If any issues remain which may best be resolved through a telephone communication, the

Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone

number listed below.

Respectfully submitted,

/James Edward Ledbetter/

Registration No. 28,732

James E. Ledbetter

Date: January 13, 2011

JEL/DWW/att

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